## Draft EVM-2 Announcement of Opportunity Applications Frequently Asked Questions 1 Jun 2015

1. Does the proposed mission investigation need to conduct an applications project and demonstrate an application?

No. NASA distinguishes between conducting an applications project directly and providing data to enable applications projects by others. Proposals do not need to contain nor conduct an applications project. For this EVM-2, proposals need to articulate a plan to address and help enable applications of the measurements, investigation results, and data products. For example, a proposal may include data products in forms, units, and widely-used formats that serve users beyond the primary research field of the proposed mission.

Proposals to this EVM-2 AO are for missions to conduct investigations that address goals in Section 2.2, and NASA emphasizes research on Earth system science issues for this EVM-2.

Sections 2.2, 2.3, 5.1.2 and 5.1.4 provide additional information on this topic.

- 2. The number of potential application users could be significant. Does our plan have to serve all possible applications communities and users?
  - No. The proposed mission should address key applications communities and users. Section 5.1.4 encourages a multidirectional information exchange as part of efforts to identify relevant communities and key ones a particular mission focuses on. The applications plan for the mission (Requirement 10) addresses the approach(es) for interaction with applications communities and users.

3. Do all proposers have to include an applications plan for their missions?

Most likely. The value of Earth science data and information to improve decisions is becoming more apparent, and the use of Earth observations is becoming more common. Thus, it is highly probably that there are applications communities and users who can use the data and information to improve their decisions, which increases the overall value and benefits of a mission.

NASA recognizes that, in some science investigations, applications are not possible. In such cases, the proposer shall explain and justify why there is no viable application dimension to the investigation. The burden of proof is on the proposing team to articulate no viable application dimension.

4. Can proposers include the application plan of the mission in the baseline mission and not in the threshold mission?

No. Applications are part of the overall mission concept. In both the baseline and threshold missions, the proposed investigation will produce data products, and the applications plan enables use of the mission's data products by applications communities and users. Thus, a plan is needed in both baseline and threshold missions. However, there may be aspects of the applications plan, such as specialized data products for particular applications communities, which are in one level and not the other.

5. Do we need to have letters of support from application communities?

Letters of support on applications aspects are not required, though they are not prohibited in the AO.

If an applications-oriented organization will offer contributions of goods and/or services or if they will be a major partner in the proposal, then a letter of commitment must be provided. Section 5.8.1 addresses letters of commitment and required elements of such letters.

6. Does there need to be a dedicated person on the team to do applications?

While encouraged, it is not a requirement. Per Requirement 38, proposals shall identify the management positions. While a Program Applications lead is not required, proposals can identify such a role. See Section 5.3.5. Furthermore, Requirement Proposal teams are strongly encouraged to identify a point of contact for applications to coordinate with NASA.

Furthermore, Section 5.4 states that science teams may include qualified representatives from applications communities.

7. Why is an applications plan required in EVM-2?

The 2007 Earth Science Decadal Survey articulated a vision for Earth science research and applications. Since the decadal survey, the NASA Earth Science program has articulated that science implies research, applied research, and applications where the relative emphasis on each is unique to an individual investigation. In addition, NASA is interested in furthering the overall value of its missions. NASA has pursued applications as part of its missions, and recent results, such as in the Soil Moisture Active Passive (SMAP) and the Global Precipitation Measurement (GPM) missions, have shown added benefits and constructive feedback from non-research users which add value to the mission without impacting other mission objectives. Thus, this change aligns the EVM-2 call with this goal.

8. The introductory paragraphs of the Evaluation Criteria Factors A and B state "emphasis and consideration of research objectives outweighs applications." What does this mean?

For this EVM-2, NASA places a strong emphasis on research and innovation for Earth system science issues, while expecting appropriate attention to applications-oriented aspects to further the overall value of the mission.

The particular statement is included in Section 7.2, Evaluation Criteria. The statement implies that the applications plan and aspects of the proposal will be a determining factor but one of lesser weighting than the research value of the mission. In other words, if two missions are considered

relatively equal on their research merit, then the applications plan and aspects could be a determining factor.

9. Is there a prescribed approach we should follow for the Applications Plan?

No. Requirement 10 stipulates that proposals describe a plan and budget for the applications dimension of the mission, including approach(es) and interaction with applications-oriented users and organizations. Proposing teams can design a plan and approach(es) that suit them.

The websites and applications plans from some missions (e.g., SMAP, ICESat-2, GRACE, and SWOT) may provide ideas for approaches.